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DT07 Rec'd P 01 NOV 2004

PCT  
H17

October 29, 2004

Our Docket No. 20020065.ORI

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Re App : James Oliver Dolly et al :  
S.N. : 10/049,967 : Art Unit unknown  
Filed : February 18, 2002  
For : ISOFORMS OF SNARE MOLECULES AND THE  
USES THEREOF IN MODULATION OF  
CELLULAR EXOCYTOSIS

TRANSMITTAL LETTER

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

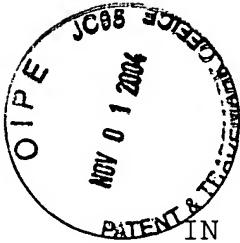
Transmitted herewith is a Response, a substitute computer readable form (CRF), and a paper copy of the substitute Sequence Listing, in reply to the Notification of Defective Response bearing a date mailed of September 30, 2004 (copy attached), together with a copy of the marked-up Sequence Listing.

The Commissioner is authorized to charge any fees listed in 37 CFR 1.16 and 1.17 which may be required by this paper to Deposit Account No. 08-1265.

Respectfully submitted,  
NIKOLAI & MERSEREAU, P.A.

*C. G. Mersereau*

C. G. Mersereau  
Registration No. 26205  
Attorneys for Applicant(s)  
820 International Centre  
900 Second Avenue South  
Minneapolis, MN 55402  
(612) 339-7461



#17

## PATENT APPLICATION

Our File No.: 20020065.ORI

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Re App : James Oliver Dolly et al : October 29, 2004  
S.N. : 10/049,967 : Art Unit unknown  
Filed : February 18, 2002  
For : ISOFORMS OF SNARE MOLECULES AND THE  
USES THEREOF IN MODULATION OF  
CELLULAR EXOCYTOSIS

---

RESPONSE

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

This paper is submitted in response to a Notification of Defective Response dated September 30, 2004 which carried a shortened-statutory period for response of one month so that a reply is due by October 30, 2004.

Accordingly, applicants submit herewith a copy of that Notice, together with attachments, with this response.

A substitute computer readable form (CRF) copy of a substitute Sequence Listing, together with a paper copy of the substitute Sequence Listing, is also being submitted with this paper.

Applicants believe that the substitute Raw Sequence Listing being submitted includes no new matter. The computer readable form (CRF) submitted herewith is identical to the paper copy submitted.

It is believed that the Raw Sequence Listing now complies with all requirements and the Response to Notification of Missing Requirements is now complete.

Entry of the substitute Raw Sequence Listing is respectfully requested.

Respectfully submitted,

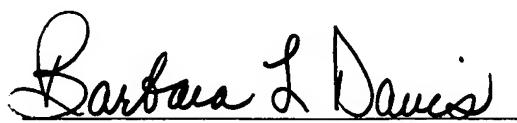
NIKOLAI & MERSEREAU, P.A.



C. G. Mersereau, #26,205  
Attorney for Applicants  
Registration No. 26,205  
900 Second Avenue South  
Suite 820, International Centre  
Minneapolis, MN 55402  
Telephone: 612-339-7461

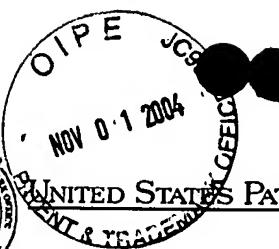
**CERTIFICATE OF MAILING**

I hereby certify that the foregoing Response, a copy of the Notification of Defective Response, a computer readable form (CRF), a paper copy of the substitute Raw Sequence Listing, and a Transmittal Letter in connection with application Serial No. 10/049,967 of inventors, James O. Dolly et al, filed February 18, 2002, for "ISOFORMS OF SNARE MOLECULES AND THE USES THEREOF IN MODULATION OF CELLULAR EXOCYTOSIS" is being deposited with the United States Postal Service as First Class Mail in an envelope addressed to: Commissioner of Patents, P. O. Box 1450, Alexandria, VA 22313-1450 on October 29, 2004.



Barbara L. Davis  
Secretary to C. G. Mersereau

Date of Signature: October 29, 2004



## UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
 United States Patent and Trademark Office  
 Address: COMMISSIONER FOR PATENTS  
 P.O. Box 1450  
 Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)



U.S. APPLICATION NUMBER NO.	FIRST NAMED APPLICANT	ATTY. DOCKET NO.
10/049,967	James Oliver Dolly	20020065.ORI

C G Mersereau  
 Nikolai & Mersereau  
 900 Second Avenue South  
 Suite 820 International Centre  
 Minneapolis, MN 55402

REC'D OCT 6 2004

INTERNATIONAL APPLICATION NO.	
I.A. FILING DATE	PRIORITY DATE
	08/18/2000

CONFIRMATION NO. 6222  
 371 FORMALITIES LETTER



\*OC000000013933985\*

Date Mailed: 09/30/2004

### NOTIFICATION OF DEFECTIVE RESPONSE

The following items have been submitted by the applicant or the IB to the United States Patent and Trademark Office as an Elected Office (37 CFR 1.495):

- Copy of the International Application filed on 02/18/2002
- Copy of the International Search Report filed on 02/18/2002
- Copy of IPE Report filed on 02/18/2002
- Preliminary Amendments filed on 02/18/2002
- Information Disclosure Statements filed on 05/21/2002
- Biochemical Sequence Diskette filed on 08/20/2004
- Oath or Declaration filed on 02/23/2004
- Biochemical Sequence Listing filed on 08/20/2004
- Copy of references cited in ISR filed on 02/18/2002
- U.S. Basic National Fees filed on 02/18/2002

*Response Oct. 30, 2004  
 10/6/04*

Applicant's response filed 08/20/2004 is hereby acknowledged. The following requirements set forth in the NOTIFICATION of MISSING REQUIREMENTS mailed 04/25/2002 have not been completed.

The following items **MUST** be furnished within the period set forth below:

- The nucleotide and/or amino acid sequence disclosure contained in this application does not comply with the requirements for such a disclosure as set forth in 37 CFR 1.821-1.825 for the following reason(s):
  - A copy of the "Sequence Listing" in computer readable form has been submitted. The content of the computer readable form, however, does not comply with the requirements of Annex C of the Administrative Instructions and 37 CFR 1.822 and/or 1.832, as indicated on the attached marked-up copy of the "Raw Sequence Listing."
  - The computer readable form that has been filed with this application has been found to be damaged and/or unreadable as indicated on the attached CRF Diskette Problem Report. A substitute computer readable form must be submitted as required by 37 CFR 1.825(d).
- APPLICANT MUST PROVIDE:
  - An initial or substitute computer readable form (CRF) of the "Sequence Listing."
  - An initial or substitute paper copy or compact disc of the "Sequence Listing," as well as an

amendment directing its entry into the specification.

- A statement that the contents of the paper or compact disc and the computer readable form are the same and, where applicable, include no new matter, as required by 37 CFR 1.821(e), 1.821(f), 1.821(g), 1.825(b) or 1.825(d).
- For questions regarding compliance to 37 CFR 1.821-1.825 requirements, please contact:
  - For Rules Interpretation, call (703) 308-4216
  - To Purchase PatentIn Software, call (703) 306-2600
  - For PatentIn Software Program Help, call (703) 306-4119 or e-mail at patin21help@uspto.gov or patin3help@uspto.gov

**Applicant is required to complete the response within a time limit of ONE MONTH from the date of this Notification or within the time remaining in the response set forth in the Notification of Missing Requirements, whichever is the longer. No extension of this time limit may be granted under 37 CFR 1.136, but the period for response set in the Notification of Missing Requirements may be extended under 37 CFR 1.136(a).**

Applicant is reminded that any communications to the United States Patent and Trademark Office must be mailed to the address given in the heading and include the U.S. application no. shown above (37 CFR 1.5)

*A copy of this notice **MUST** be returned with the response.*

VONDA M WALLACE

Telephone: (703) 305-3736

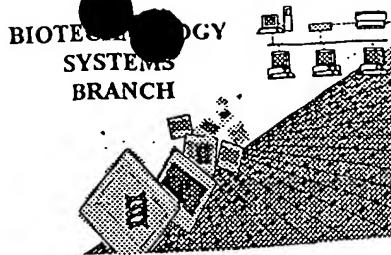
**PART 1 - ATTORNEY/APPLICANT COPY**

U.S. APPLICATION NUMBER NO.	INTERNATIONAL APPLICATION NO.	ATTY. DOCKET NO.
10/049,967	PCT/GB00/03196	20020065.ORI

FORM PCT/DO/EO/916 (371 Formalities Notice)

**BEST AVAILABLE COPY**

PUT/10



## CRF Problem Report

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) experienced a problem when processing the following computer readable form (CRF):

Application Serial Number: 10/049,969B  
Filing Date: 2/18/02  
Date Processed by STIC: 9/10/04

STIC Contact: Mark Spencer: Telephone: 571-272-2510; Fax: 571-273-0221

### Nature of Problem:

The CRF (was):

- Damaged or Unreadable (for Unreadable, see attached)  
 Blank (no files on CRF) (see attached)  
 Empty file (filename present, but no bytes in file) (see attached)  
 Virus-infected. Virus name: \_\_\_\_\_ The STIC will not process the CRF.  
 Not saved in ASCII text (see attached)  
 Sequence Listing was embedded in the file. According to Sequence Rules,  
submitted file should only be the Sequence Listing.  
 Did not contain a Sequence Listing. (see attached sample)  
 Other:

**PLEASE USE THE CHECKER VERSION 4.2 PROGRAM TO REDUCE ERRORS.**

**SEE BELOW FOR ADDRESS:**

<http://www.uspto.gov/web/offices/pac/checker/chkrnote.htm>

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.

Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<<http://www.uspto.gov/ebc/efs/downloads/documents.htm>> , EFS Submission User Manual - ePAVE)
2. U.S. Postal Service: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
3. Hand Carry, Federal Express, United Parcel Service, or other delivery service (EFFECTIVE 06/05/04):  
U.S. Patent and Trademark Office, 220 20<sup>th</sup> Street S., Customer Window, Mail Stop Sequence, Crystal Plaza Two, Lobby, Room 1B03, Arlington, VA 22202

Revised 05/19/04

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The submitted file was saved  
in "pdf" (Acrobat) format which is  
invalid per Sequence Rules. 1.824 of Sequence  
states that sequence listing  
file be saved in ASCII  
SEQUENCE LISTING text format.

10/049,967B 2

Do NOT show line numbers. This is a scanned  
version of most  
of previous  
submissions.

*delete*

delete alphabetical headings

3 <110> APPLICANT: Imperial College Innovations Limited  
5 <120> TITLE OF INVENTION: Methods of treatment  
7 <130> FILE REFERENCE: ICOY/P23294PC  
2--> 9 <140> CURRENT APPLICATION NUMBER: US/10/049,967  
2--> 10 <141> CURRENT FILING DATE: 2002-02-18  
12 <160> NUMBER OF SEQ ID NOS: 32  
14 <170> SOFTWARE: PatentIn Ver. 2.0  
16 <210> SEQ ID NO: 1  
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61 <211> LENGTH: 32  
62 <212> TYPE: DNA  
63 <213> ORGANISM: Artificial Sequence

28 Shown invention title  
in submitted application  
file (p.6) (see bottom of  
page)

25

30

29

30

Please  
consult  
Sequence  
Rules  
for valid  
format.

Another invention title given in application: "Isoforms of Snare  
Molecules and the  
Uses Thereof in Modulati  
of Cellular Exocytosis"

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10/9/99, 967B

3

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10/01/96 7B 4

~~no page has allowed~~

primer?

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135 cccagcatct ttgttgccgc tgggtggct tcac  
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198 <223> OTHER INFORMATION: Description of Artificial Sequence: pcr primer

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234 Gln Arg Ala Thr Lys Met Leu Gly Ser Gly  
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 261 1 S 10 ← misaligned. Per Sequence Rules, number

264 <210> SEQ ID NO: 23

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266 <212> TYPE: PRT

267 <213> ORGANISM: Artificial Sequence

Please give source of genetic material, when explaining Artificial sequence

misaligned amino acid numbers. Do NOT use TAB codes between amino acid numbers. Use space characters, instead.

delete 10

The amino acids begin every 5 = amino acids

269 &lt;220&gt;

270 &lt;223&gt; OTHER INFORMATION: Description of Artificial Sequence: SNAP-25 C-terminus related peptide

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273 Gln Thr Ala Thr Lys Met Leu

274 1      5      10      misaligned

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280 &lt;213&gt; ORGANISM: Artificial Sequence

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283 &lt;223&gt; OTHER INFORMATION: Description of Artificial Sequence: SNAP-25 C-terminus related peptide

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287 1      5      10      ← ← misaligned

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335 &lt;223&gt; OTHER INFORMATION: Description of Artificial Sequence: SNAP-25 C-terminus related peptide

337 &lt;400&gt; SEQUENCE: 28

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